California Environmental Protection Agency Air Resources Board

DEUTZ AG

EXECUTIVE ORDER U-R-013-0539 New Off-Road Compression-Ignition Engines

Pursuant to the authority vested in the Air Resources Board by Sections 43013, 43018, 43101, 43102, 43104 and 43105 of the Health and Safety Code; and

Pursuant to the authority vested in the undersigned by Sections 39515 and 39516 of the Health and Safety Code and Executive Order G-14-012;

IT IS ORDERED AND RESOLVED: That the following compression-ignition engines and emission control systems produced by the manufacturer are certified as described below for use in off-road equipment. Production engines shall be in all material respects the same as those for which certification is granted.

MODEL YEAR	ENGINE FAMILY	DISPLACEMENT (liters)	FUEL TYPE	USEFUL LIFE (hours)		
2017	HDZXL06.1059	6.057	Diesel	8000		
SPECIAL FEATURES & EMISSION CONTROL SYSTEMS			TYPICAL EQUIPMENT APPLICATION			
Cooler Recircula	Rail Direct Injection, Turb r, Electronic Control Modu ation, Diesel Oxidation Ca xidizer, Selective Catalyti	ule, Exhaust Gas atalyst, Continuous	Offroad Crane, Loader, Pump, Compressor, Other Industrial Equipment			

The engine models and codes are attached.

The following are the exhaust certification standards (STD) and certification levels (CERT) for non-methane hydrocarbon (NMHC), oxides of nitrogen (NOx), or non-methane hydrocarbon plus oxides of nitrogen (NMHC+NOx), carbon monoxide (CO), and particulate matter (PM) in grams per kilowatt-hour (g/kW-hr), and the opacity-of-smoke certification standards and certification levels in percent (%) during acceleration (Accel), lugging (Lug), and the peak value from either mode (Peak) for this engine family (Title 13, California Code of Regulations, (13 CCR) Section 2423):

RATED POWER CLASS	EMISSION STANDARD CATEGORY		EXHAUST (g/kW-hr)				OPACITY (%)			
		1	NMHC	NOx	NMHC+NOx	co	PM	ACCEL	LUG	PEAK
75 ≤ kW < 130	Tier 4 Final	STD	0.19	0,40	N/A	5.0	0.02	N/A	N/A	N/A
		CERT	0.02	0.18		1.5	0.01			

BE IT FURTHER RESOLVED: That for the listed engine models, the manufacturer has submitted the information and materials to demonstrate certification compliance with 13 CCR Section 2424 (emission control labels), and 13 CCR Sections 2425 and 2426 (emission control system warranty).

Engines certified under this Executive Order must conform to all applicable California emission regulations.

This Executive Order is only granted to the engine family and model-year listed above. Engines in this family that are produced for any other model-year are not covered by this Executive Order.

Executed at El Monte, California on this

day of March 2017.

Annette Hebert, Chief

Emissions Compliance, Automotive Regulations and Science Division

Deutz AG Nonroad Cl

HDZXL06.1059

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Engine Family 1.Engine Code

CFVI129

CFVI129A

CFVI129B

CFVI120

CFVI105

2.Engine Model

TCD6.1L6

TCD6.1L6

TCD6.1L6

TCD6.1L6

TCD6.1L6

172.9@2100

160.9@1800

140.8@2000

Engine Model Summary Template

Attachment

90.7

94.5

76.5

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63.4

56.6

50.9

553.2@1450

549.5@1450

464.7@1450

E0#U-R-013-0539

DDI,TC,CAC,ECM,EGR,DOC,CTOX,SCR-U

DDI,TC,CAC,ECM,EGR,DOC,CTOX,SCR-U

DDI,TC,CAC,ECM,EGR,DOC,CTOX,SCR-U

Date: 3/9/2017

3.BHP@RPM (SAE Gross)	4.Fuel Rate: mm/stroke @ peak HP (for diesel only)			7.Fuel Rate: mm/stroke@pe ak torque	8.Fuel Rate: (lbs/hr)@peak torque	9.Emission Control Device Per SAE J1930	
172.9@2200	88.5	64.8	553.2@1450	108.5	52.4	DDI,TC,CAC,ECM,EGR,DOC,CTOX,SCR-U	
172.9@2000	93.0	61.9	553.2@1450	108.5	52.4	DDLTC.CAC.ECM.EGR.DOC.CTOX.SCR-U	

108.5

108.0

91.5

52.4

52.1

44.2